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WHAT IS CLAIMED IS:

1. An automated item dispensing system comprising:
  - (a) at least one dispenser capable of dispensing an item;
  - (b) at least one local controller in communication with a respective dispenser
  - 5 for controlling and monitoring the dispenser;
  - (c) a central controller for receiving and processing electronic item orders from at least one user;
  - (d) a communication network for providing communication between said local controller, said central controller, said at least one user and at least one
  - 10 supplier;

wherein said dispenser comprises:

  - (i) at least one rotatable carousel located internal to the dispenser, the carousel comprising at least one cell defined by two side walls each side wall extending from a central location of the carousel;
  - 15 (ii) an access hatch aligned with the or each carousel for accessing an interior of the at least one cell; and
  - (iii) a motor for rotating the carousel.
2. The automated item dispensing system of claim 1 wherein said system includes the step of at least one supplier delivering an item to a location of the
- 20 dispenser in response to a communication received via said communication network.
3. The automated item dispensing system of claim 2 wherein the at least one supplier delivers the item to a cell of said carousel.

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4. The automated item dispensing system of claim 2 wherein the at least one supplier delivers the item to an operator who delivers the item to a cell of said carousel.
5. The automated item dispensing system of claim 1 wherein said dispenser  
5 is a temperature controlled dispenser.
6. The automated item dispensing system of claim 5 wherein said temperature controlled dispenser is a room temperature cabinet, incubator, refrigerator or freezer.
7. The automated item dispensing system of claim 6 wherein said  
10 temperature controlled cabinet is suitable for dispensing a biological reagent.
8. The automated item dispensing system of claim 1 wherein said local controller performs at least one of the following functions: rotation of the carousel by controlling the motor, controlling dispensing of an item from the dispenser, monitoring an amount of an item within the dispenser, reporting to the central  
15 controller the amount of an item within the dispenser, making an activity log and temperature log of the dispenser, informing a user of availability of an item, receiving information from the central controller in relation to item delivery to the dispenser and temperature control setting of the dispenser and monitoring and controlling an internal environment of the dispenser.
- 20 9. The automated item dispensing system of claim 1 wherein said local controller further comprises a reader and writer of a dynamic storage device that stores information in relation to the user(s).
10. The automated item dispensing system of claim 9 wherein said dynamic

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storage device is a transaction card or smart card.

11. The automated item dispensing system of claim 1 wherein said central controller performs at least one of the following functions: advising the user(s) of item availability and item delivery date to the dispenser, monitoring an amount of item within the dispenser, informing the supplier of items purchased by the user(s) and requesting the supplier to provide additional items to replace items dispensed from the dispenser.

12. The automated item dispensing system of claim 1 wherein the local controller and the central controller are each computers.

13. The automated item dispensing system of claim 1 wherein the supplier(s) communicate with the dispenser via the central controller.

14. The automated item dispensing system of claim 1 wherein the communication network is selected from the group consisting of: an intranet, an Ethernet, an Internet, a telephone network, a wireless network and a combination thereof.

15. The automated item dispensing system of claim 1 wherein said motor is attached to the carouse by a shaft located central to the carousel.

16. The automated item dispensing system of claim 1 wherein said motor is located external to the dispenser.

17. The automated item dispensing system of claim 1 wherein the access hatch is lockable.

18. The automated item dispensing system of claim 1 wherein the local controller controls locking and unlocking of the access hatch.

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19. Use of the automated item dispensing system of claim 1 to dispense an item located within a cell of the carousel.

20. Use of the automated item dispensing system of claim 19, wherein said item is a biological reagent.

5 21. Use of the automated item dispensing system of claim 19 wherein a user is capable of determining an abundance of at least one item in the dispenser remotely via email using a communications network linked to the central controller and local controller.

22. Use of the automated item dispensing system of claim 19 wherein the user  
10 is capable of determining an abundance of at least one item in the dispenser directly with the local controller through physical interaction with said local controller.

23. Use of the automated item dispensing system of claim 22 wherein said physically interaction is via a keyboard, mouse, touch screen or voice activation.

15 24. An item dispenser for use with the automated item dispensing system comprising:

(1) an environmentally controlled cabinet;

(2) at least one rotatable carousel located within the cabinet,

wherein the carousel comprises a plurality of cells defined by two side  
20 walls, each side wall extending from a central location of the carousel;

(3) an access hatch aligned with each rotatable carousel for  
accessing an interior of the cells;

(4) a motor for rotating the carousel; and

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(5) a local controller for controlling rotation of the carousel and monitoring availability of an item located within a cell of the carousel.

25. The item dispenser of claim 24 wherein the local controller further monitors and controls environmental conditions within the cabinet.

5 26. The item dispenser of claim 24 wherein the local controller controls locking and unlocking of the access hatch.  
activation.

27. An automated item dispensing system comprising:

- (1) an environmentally controlled cabinet;
- 10 (2) at least one multiple celled dispenser;
- (3) an access hatch aligned with the dispenser for accessing an interior of the cells;
- (4) a motor for moving or rotating the dispenser or one or more cells in the dispenser; and
- 15 (5) a local controller for controlling movement of the dispenser and monitoring availability of an item located within a cell of the dispenser.

28. A method for automatically dispensing items comprising use of an automated item dispensing system, wherein the automated item dispensing system  
20 comprises:

(a) at least one multiple celled dispenser capable of dispensing at least one item, where the multiple celled dispenser comprises (i) multiple cells, (ii) an access hatch aligned with the dispenser for accessing an interior of the cells, (iii) a

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motor for moving or rotating the dispenser or one or more cells in the dispenser;

and (iv) a local controller for controlling movement of the dispenser and

monitoring availability of an item located within a cell of the dispenser;

(b) a central controller for receiving and processing electronic item orders

5 from at least one user; and

(c) a communication network for providing communication between said

local controller, said central controller, said at least one user and at least one

supplier.

29. The method of claim 28, wherein the communication network comprises an

10 intranet, an Ethernet, an Internet, a wireless network, a telephone network, or a

combination thereof.